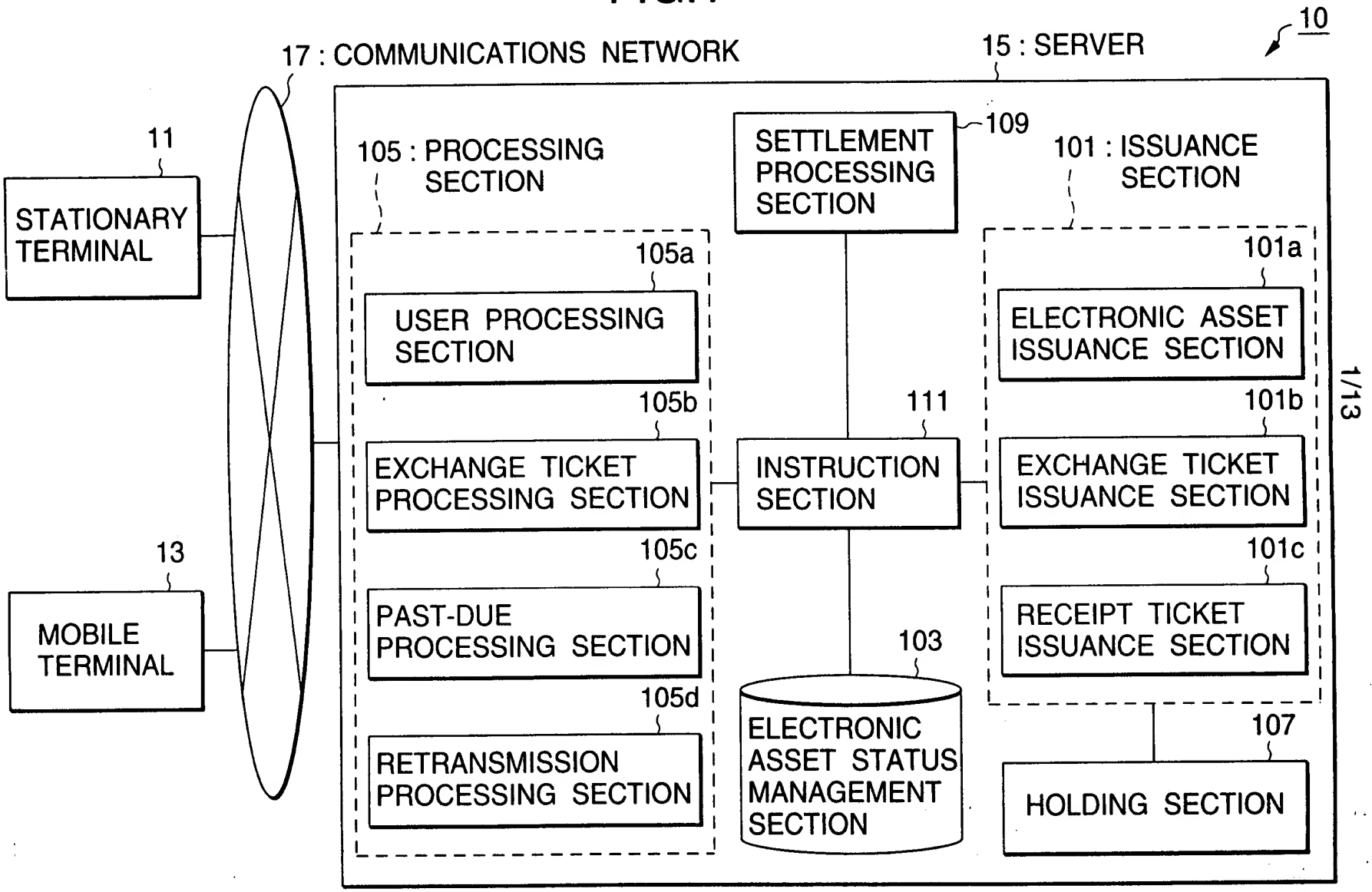
FIG.1


10
17 : COMMUNICATIONS NETWORK
15 : SERVER
11
STATIONARY TERMINAL
13
MOBILE TERMINAL
105 : PROCESSING SECTION
105a
USER PROCESSING SECTION
105b
EXCHANGE TICKET PROCESSING SECTION
105c
PAST-DUE PROCESSING SECTION
105d
RETRANSMISSION PROCESSING SECTION
SETTLEMENT PROCESSING SECTION
109
111
INSTRUCTION SECTION
103
ELECTRONIC ASSET STATUS MANAGEMENT SECTION
101 : ISSUANCE SECTION
101a
ELECTRONIC ASSET ISSUANCE SECTION
101b
EXCHANGE TICKET ISSUANCE SECTION
101c
RECEIPT TICKET ISSUANCE SECTION
107
HOLDING SECTION

1/13

FIG.2A

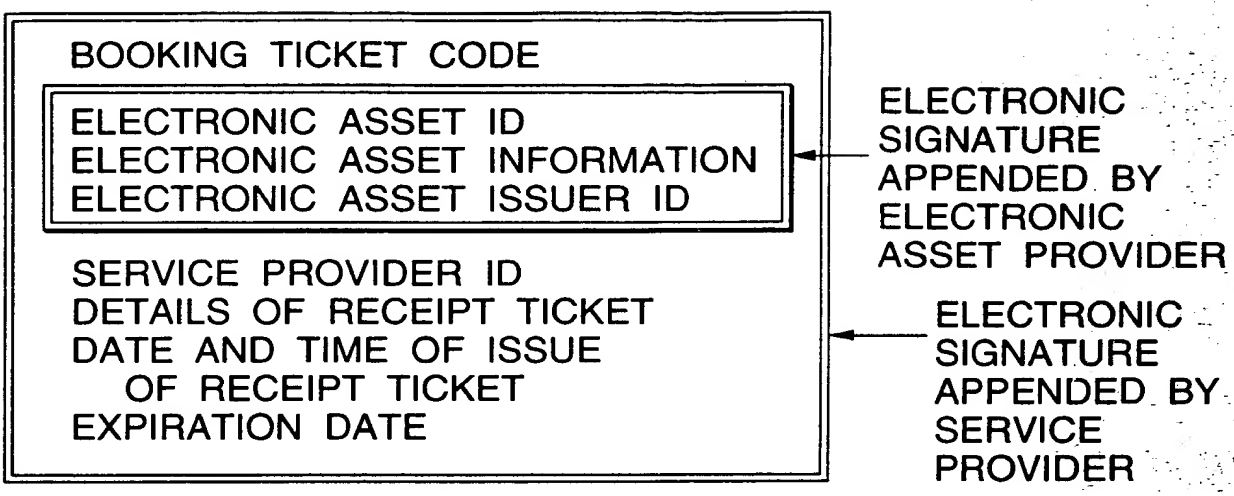


FIG.2B

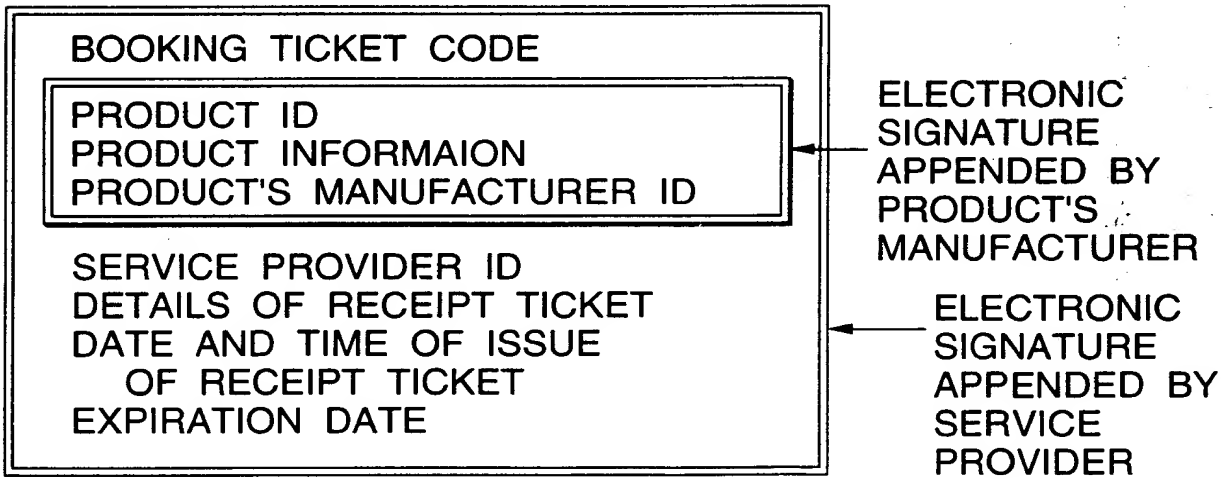


FIG.2C

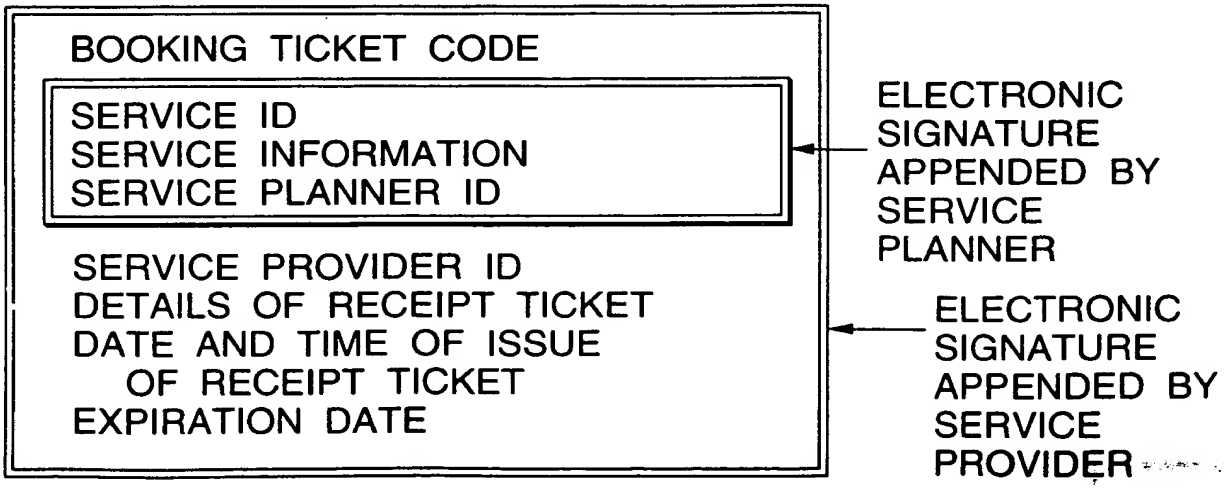


FIG.3

300

300a ELECTRONIC ASSET ID	300b DATE AND TIME OF ISSUE OF ELECTRONIC ASSET	300c EXPIRATION DATE OF ELECTRONIC ASSET	300d PRESENCE/ ABSENCE OF EXCHANGE TICKET	300e EXPIRATION DATE OF EXCHANGE TICKET	300f STATUS	. . .
123456788	2000/12/14 13:10:11	2000/12/31 22:00:00	YES	2000/12/30 00:00:00	COMPLETION OF A REFUND	. . .
123456789	2000/12/14 13:12:11	2000/12/31 22:00:00	YES	2000/12/30 00:00:00	AWAITING A USER'S REQUEST FOR EXCHANGE	. . .
123456790	2000/12/14 13:12:19	2000/12/31 22:00:00	YES	2000/12/30 00:00:00	AWAITING DOWNLOADING OF DATE PERTAINING TO A DESIGNATED EXPIRATION DATE	. . .
123456798	2000/12/14 13:13:13	2001/04/01 22:00:00	NO	2000/12/30 00:00:00	COMPLETION OF DOWNLOADING OF AN ELECTRONIC ASSET	. . .
123456799	2000/12/14 13:17:11	2000/12/31 22:00:00	YES	2000/12/30 00:00:00	COMPLETION OF DOWNLOADING OF AN ELECTRONIC ASSET	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .

FIG.4

MESSAGE
CHRISTMAS CONCERT DATE : DECEMBER 25TH, 2000 THE EXPIRATION DATE BY WHICH THE EXCHANGE TICKET CAN BE EXCHANGED FOR AN ELECTRONIC TICKET IS NEAR AT HAND. PLEASE EXCHANGE THE EXCHANGE TICKET FOR THE ELECTRONIC TICKET IMMEDIATELY. A REFUND CANNOT BE GIVEN FOR AN EXPIRED TICKET.

FIG.5A

DOWNLOAD MESSAGE
CHRISTMAS CONCERT DATE : DECEMBER 25TH, 2000 SELECT EITHER OF THE FOLLOWING TWO OPERATIONS AND PRESS THE ENTER KEY. ■ DOWNLOAD THE TICKET □ ANOTHER OPERATION

FIG.5B

DOWNLOAD MESSAGE
CHRISTMAS CONCERT DATE : DECEMBER 25TH, 2000 SELECT ONE ACTION FROM THE FOLLOWING OPERATIONS AND PRESS THE ENTER KEY. ■ REFUNDING □ CHANGING TICKET TO ANOTHER TICKET □ DOWNLOAD TICKET LATER

FIG.6

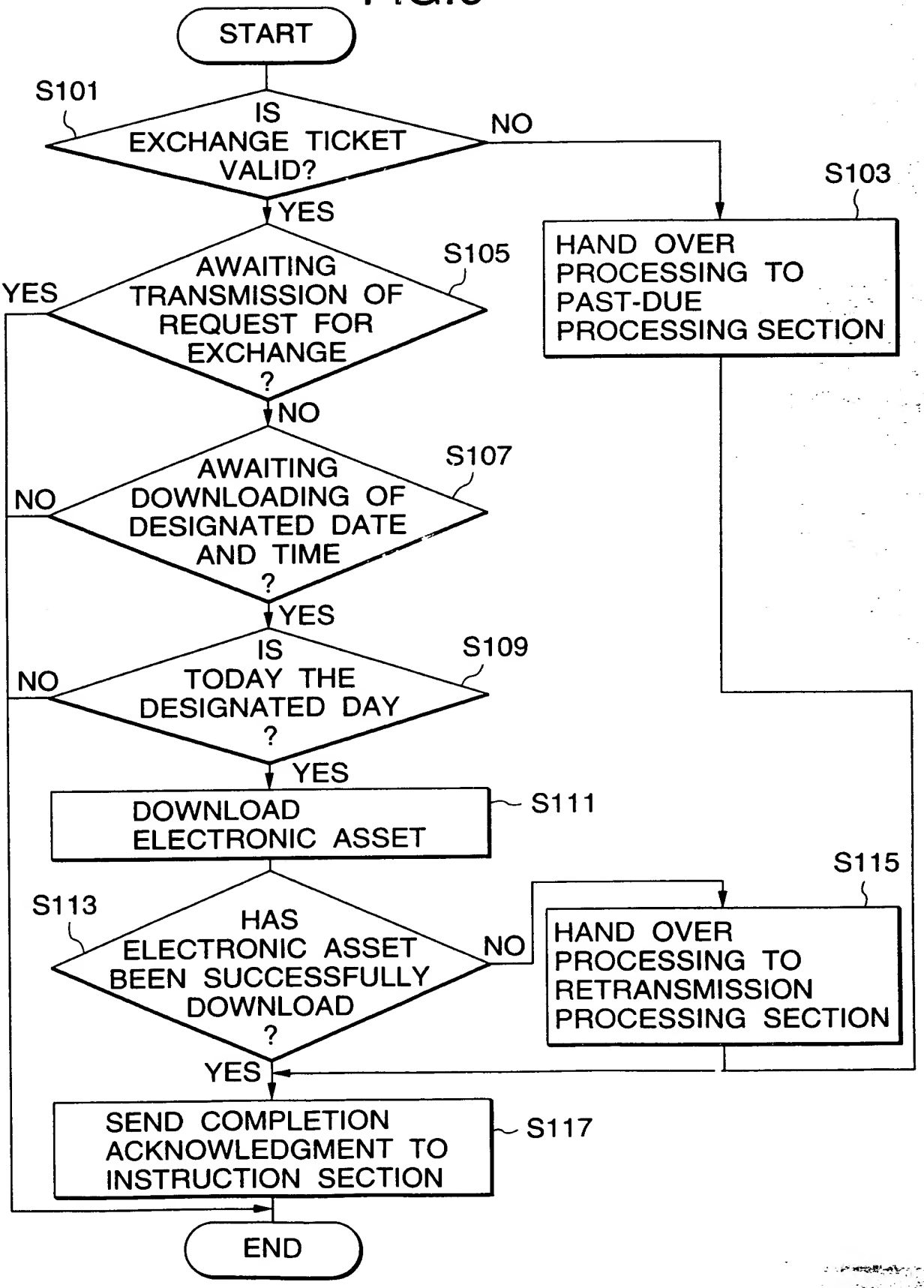

START
S101
IS EXCHANGE TICKET VALID?
NO
YES
S103
HAND OVER PROCESSING TO PAST-DUE PROCESSING SECTION
S105
AWAITING TRANSMISSION OF REQUEST FOR EXCHANGE ?
YES
NO
S107
AWAITING DOWNLOADING OF DESIGNATED DATE AND TIME ?
NO
YES
S109
IS TODAY THE DESIGNATED DAY ?
NO
YES
S111
DOWNLOAD ELECTRONIC ASSET
S113
HAS ELECTRONIC ASSET BEEN SUCCESSFULLY DOWNLOAD ?
NO
S115
HAND OVER PROCESSING TO RETRANSMISSION PROCESSING SECTION
YES
S117
SEND COMPLETION ACKNOWLEDGMENT TO INSTRUCTION SECTION
END

FIG.7

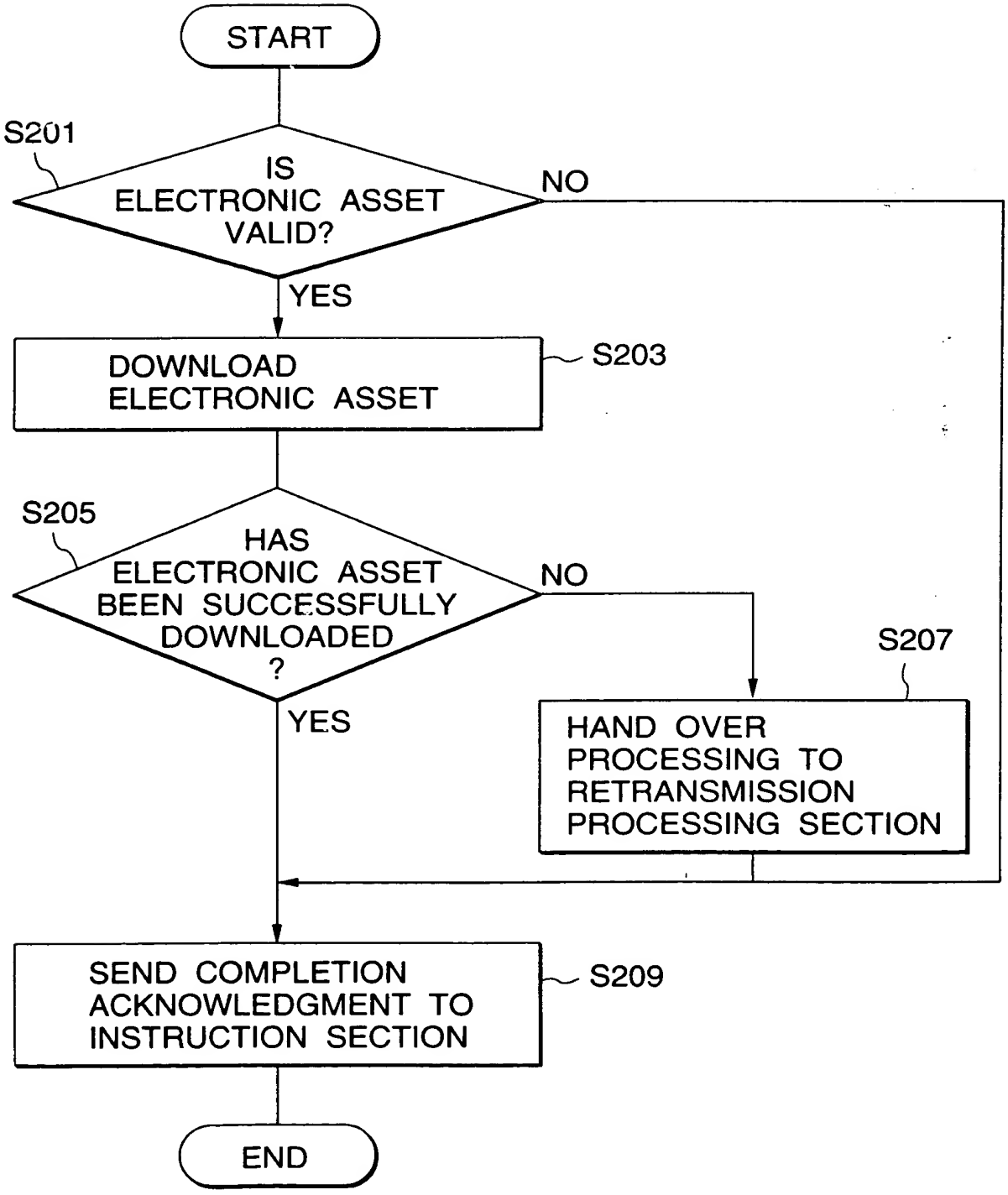

START
S201
IS ELECTRONIC ASSET VALID?
NO
YES
DOWNLOAD ELECTRONIC ASSET
S203
S205
HAS ELECTRONIC ASSET BEEN SUCCESSFULLY DOWNLOADED ?
NO
YES
S207
HAND OVER PROCESSING TO RETRANSMISSION PROCESSING SECTION
SEND COMPLETION ACKNOWLEDGMENT TO INSTRUCTION SECTION
S209
END

FIG.8

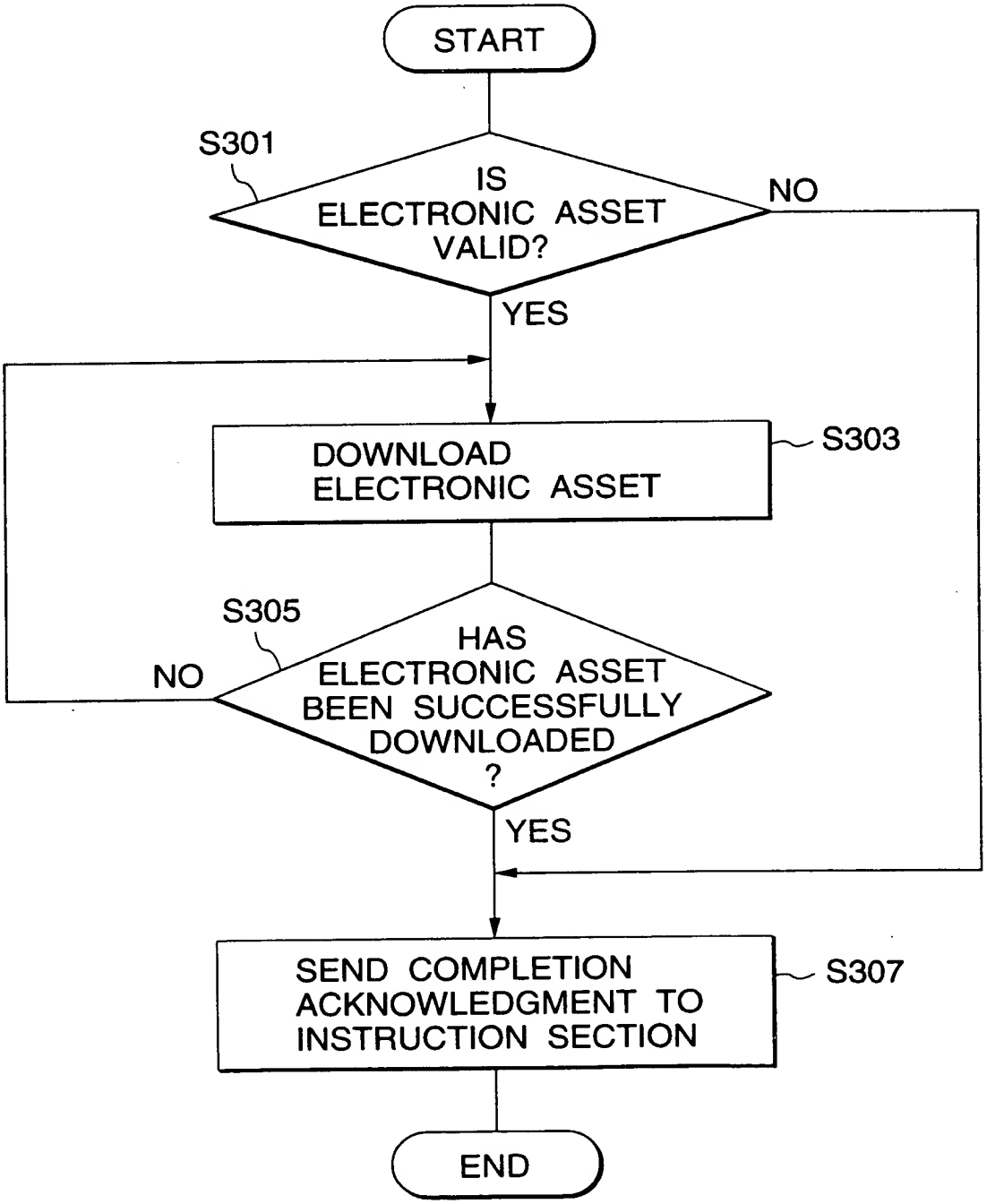

START
S301
IS ELECTRONIC ASSET VALID?
NO
YES
DOWNLOAD ELECTRONIC ASSET
S303
S305
HAS ELECTRONIC ASSET BEEN SUCCESSFULLY DOWNLOADED ?
NO
YES
SEND COMPLETION ACKNOWLEDGMENT TO INSTRUCTION SECTION
S307
END

FIG.9

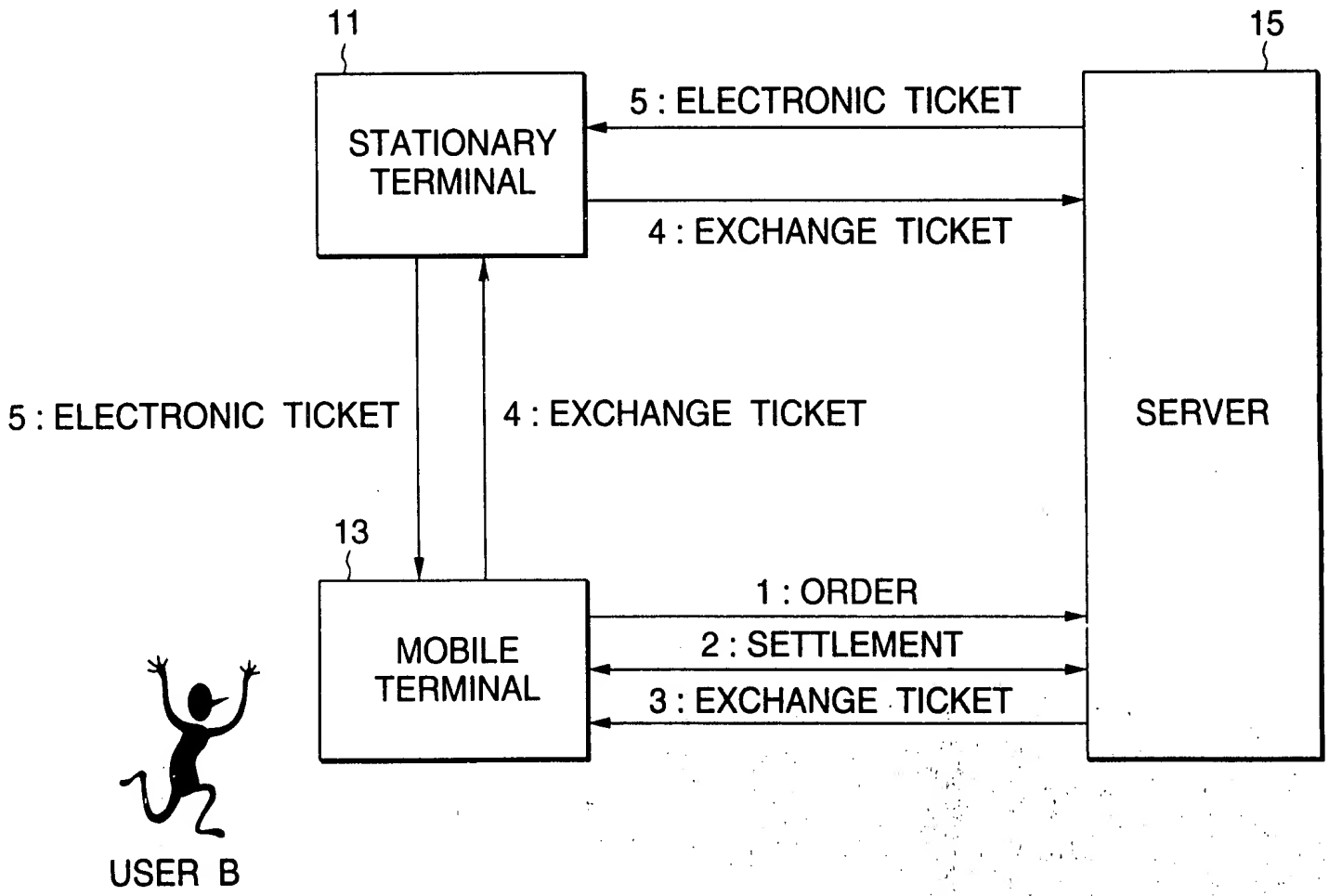

11
15
STATIONARY TERMINAL
5 : ELECTRONIC TICKET
4 : EXCHANGE TICKET
5 : ELECTRONIC TICKET
4 : EXCHANGE TICKET
SERVER
13
MOBILE TERMINAL
1 : ORDER
2 : SETTLEMENT
3 : EXCHANGE TICKET
USER B

FIG.10

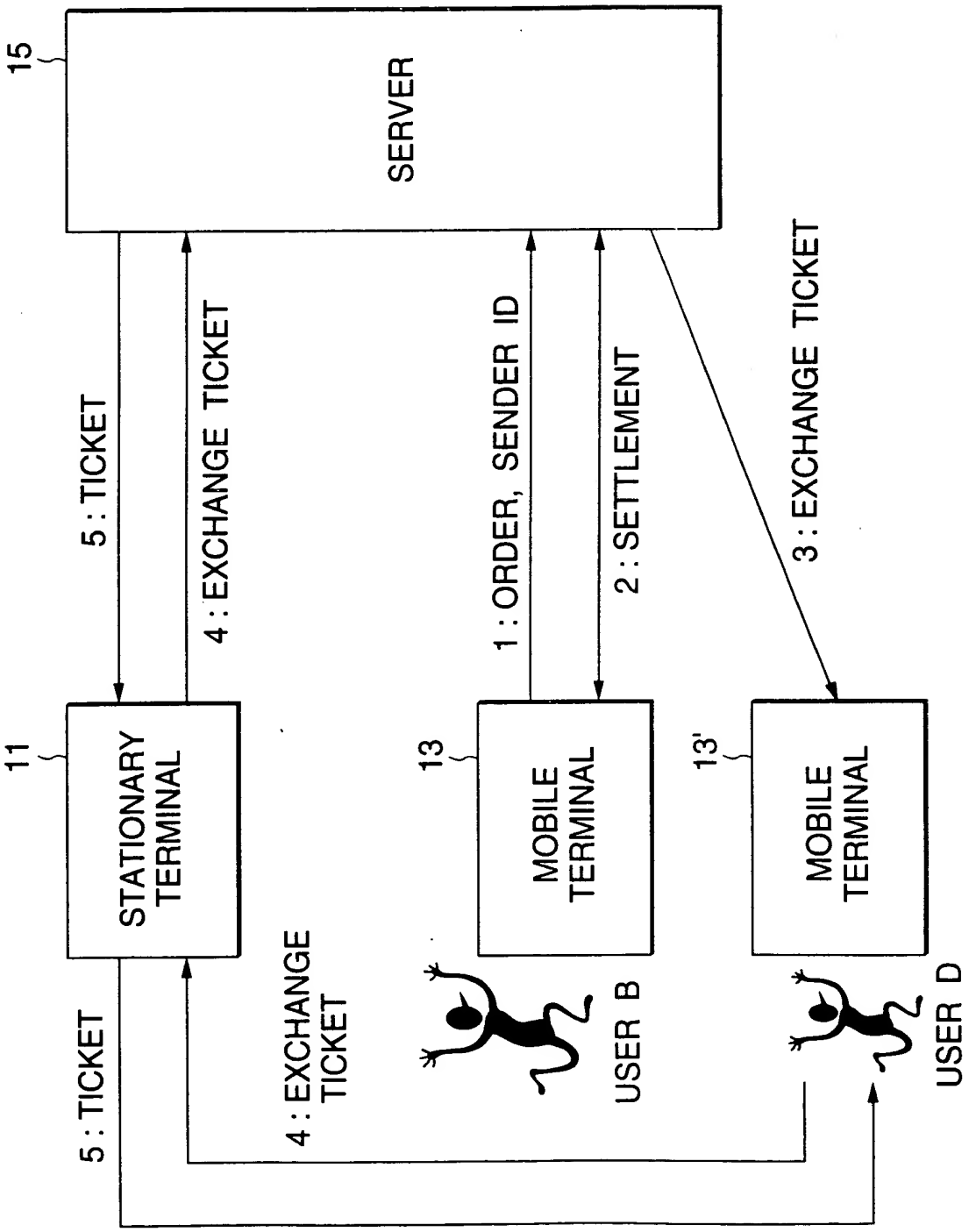

15
SERVER
5 : TICKET
4 : EXCHANGE TICKET
1 : ORDER, SENDER ID
2 : SETTLEMENT
3 : EXCHANGE TICKET
11
STATIONARY TERMINAL
13
MOBILE TERMINAL
13'
MOBILE TERMINAL
5 : TICKET
4 : EXCHANGE TICKET
USER B
USER D

FIG.11

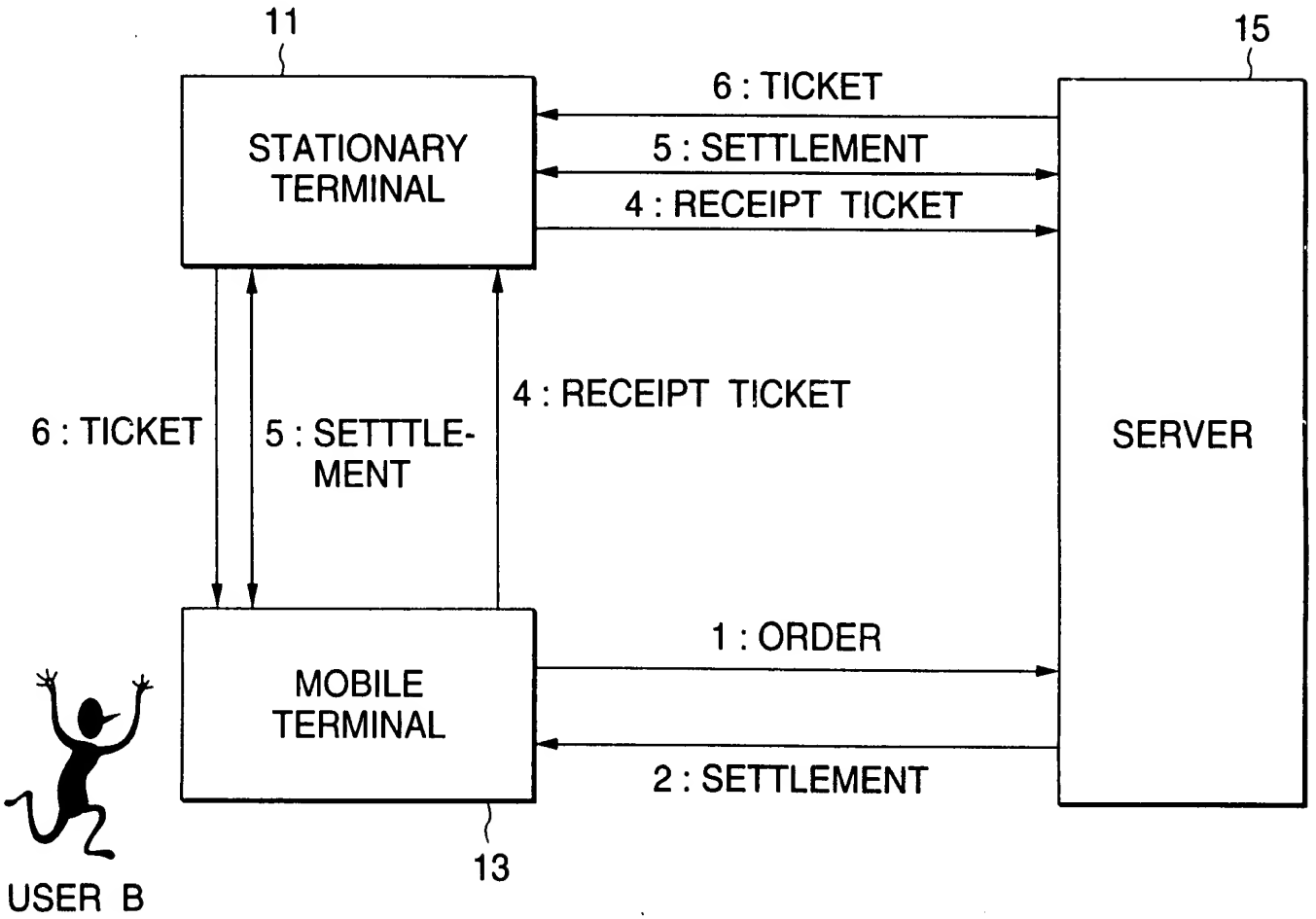

11
15
STATIONARY TERMINAL
6 : TICKET
5 : SETTLEMENT
4 : RECEIPT TICKET
6 : TICKET
5 : SETTTLE-MENT
4 : RECEIPT TICKET
SERVER
MOBILE TERMINAL
1 : ORDER
2 : SETTLEMENT
13
USER B

FIG.12

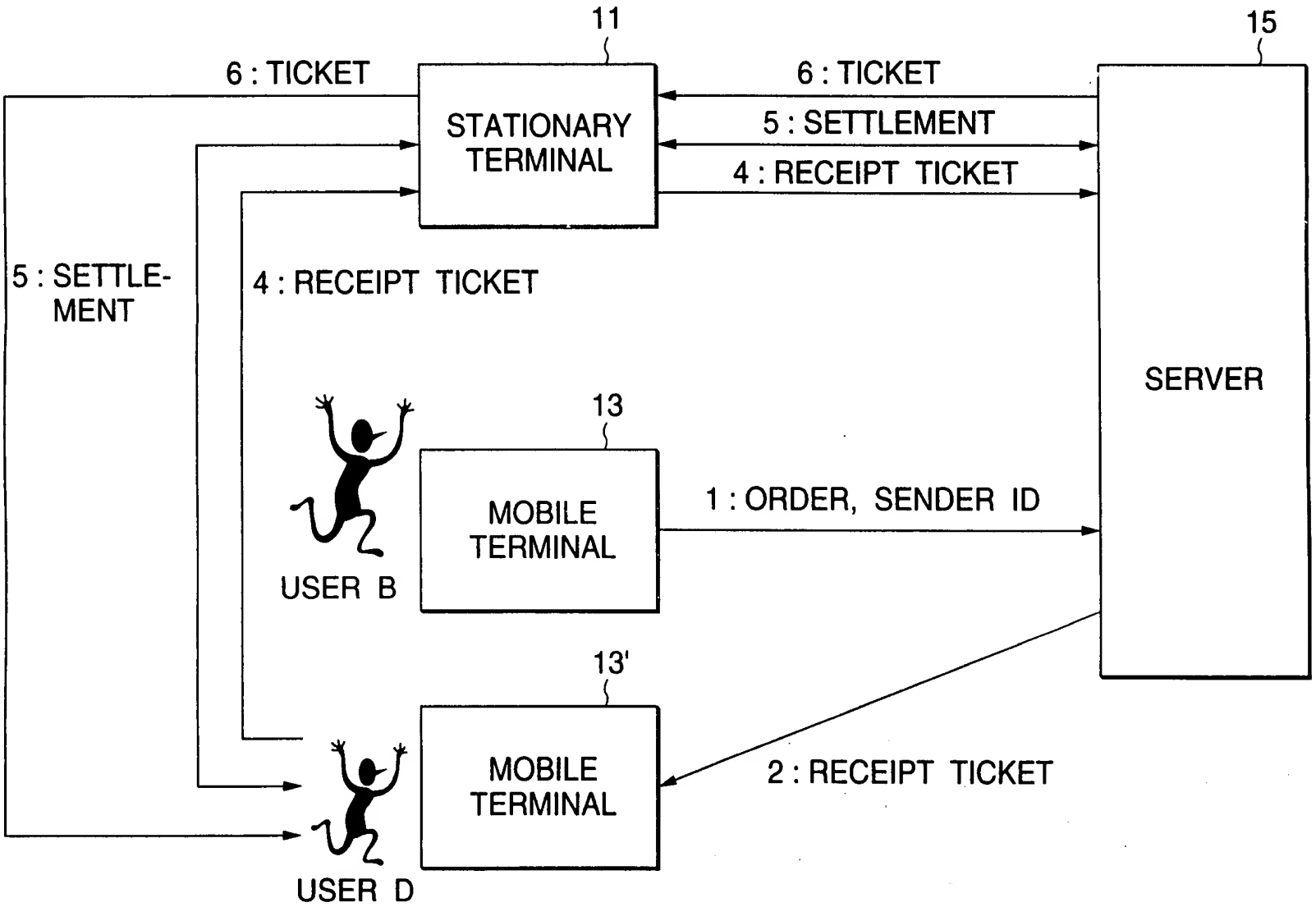
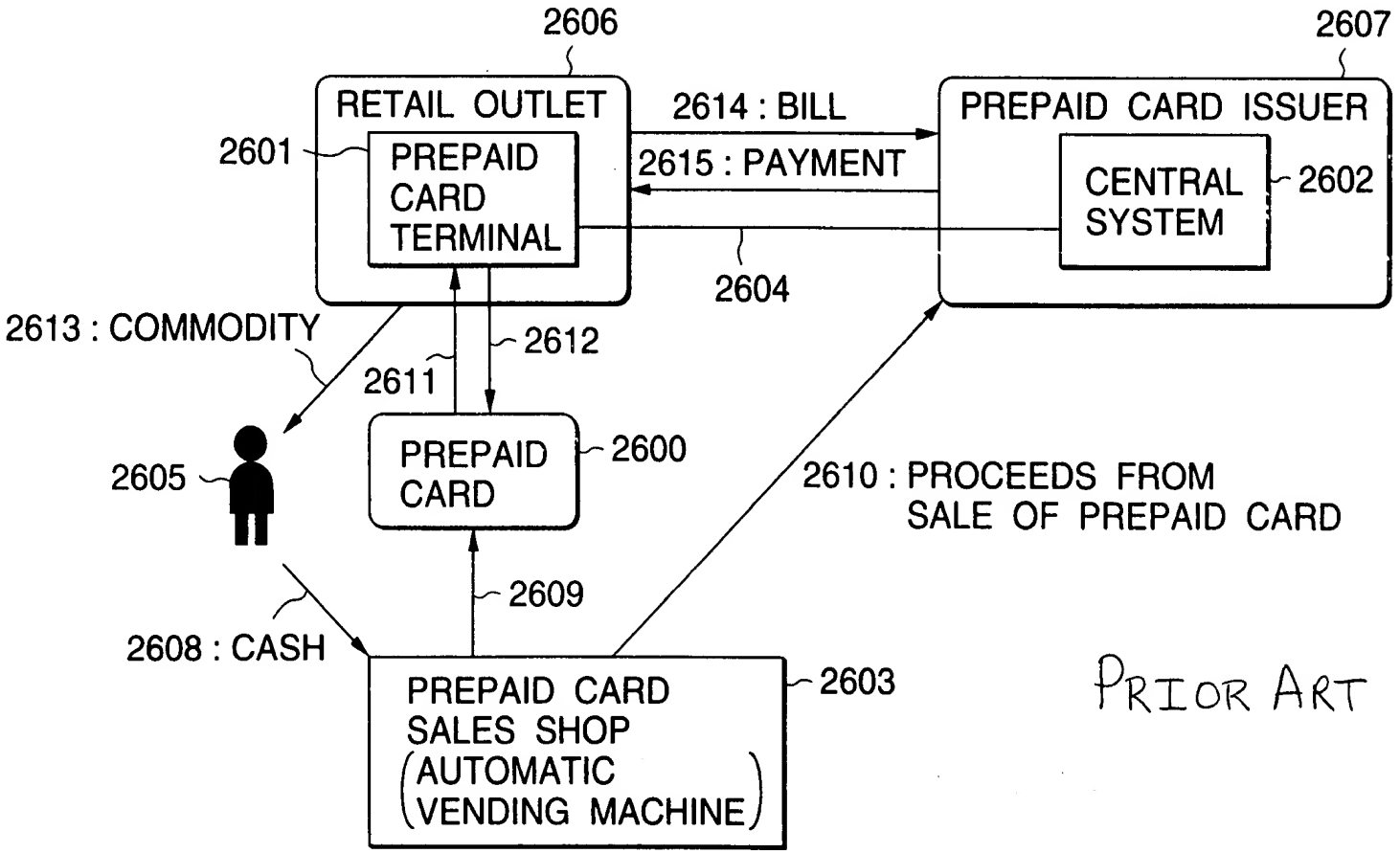
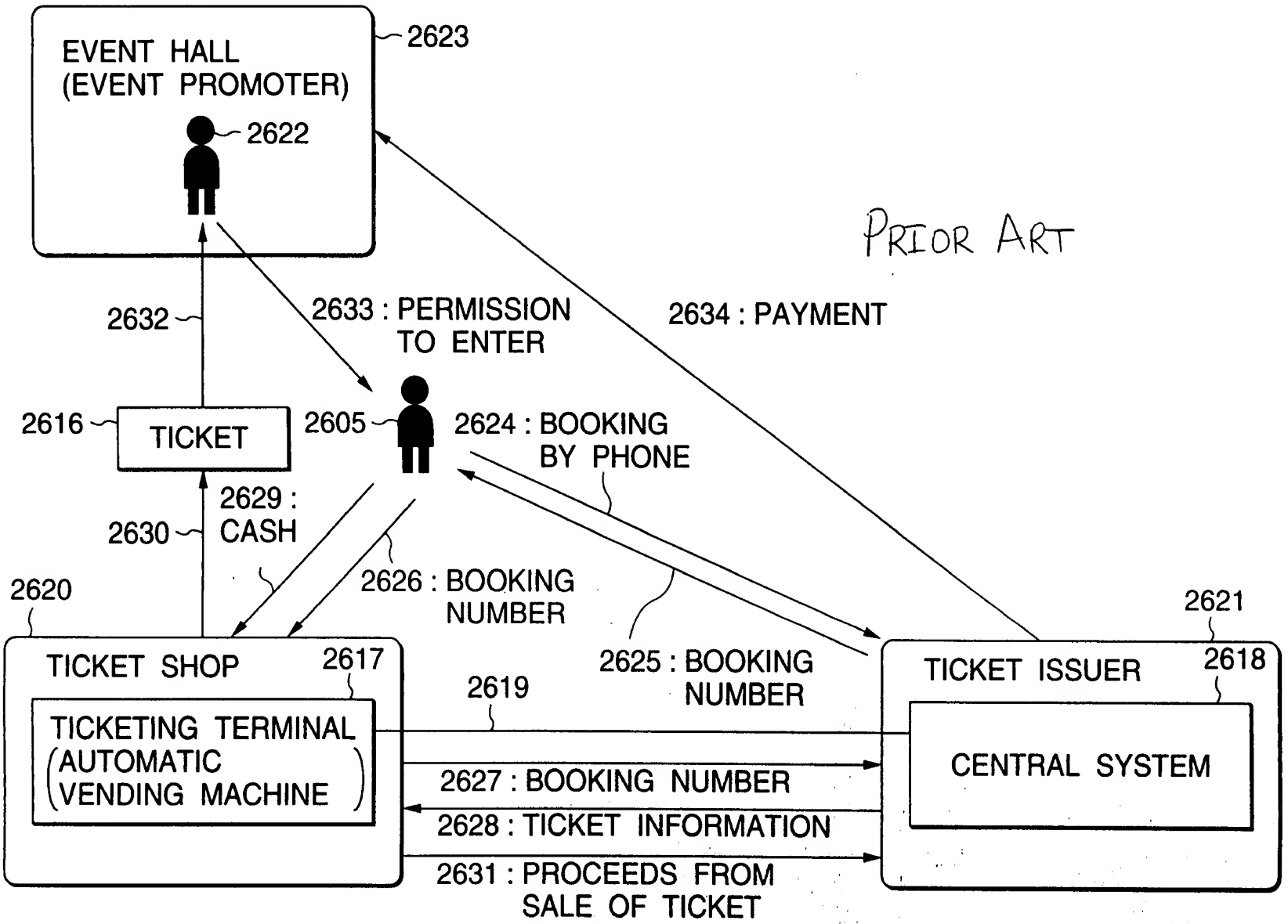

11
15
6 : TICKET
6 : TICKET
STATIONARY TERMINAL
5 : SETTLEMENT
4 : RECEIPT TICKET
5 : SETTLE-MENT
4 : RECEIPT TICKET
SERVER
13
MOBILE TERMINAL
1 : ORDER, SENDER ID
USER B
13'
MOBILE TERMINAL
2 : RECEIPT TICKET
USER D

FIG.13



PRIOR ART

FIG.14



PRIOR ART